

AMENDED IN SENATE APRIL 4, 2013

SENATE BILL

No. 395

Introduced by Senator Jackson

February 20, 2013

An act to ~~add Article 17 (commencing with Section 25258.3) to Chapter 6.5 of the Health and Safety Code, relating to hazardous substances; amend Section 25159.12 of the Health and Safety Code, and to amend Section 3205.2 of the Public Resources Code, relating to hazardous waste.~~

LEGISLATIVE COUNSEL'S DIGEST

SB 395, as amended, Jackson. Hazardous ~~substances; produced water; waste; wells.~~

Existing

(1) Existing law, part of the hazardous waste control law, requires the Department of Toxic Substances Control to adopt regulations to establish a process by which chemicals or chemical ingredients in products may be identified and prioritized for consideration as being chemicals of concern and to establish a process by which chemicals of concern may be evaluated. The department is prohibited from duplicating or adopting conflicting regulations for regulated product categories prohibits a person from discharging hazardous waste into an injection well unless certain conditions are met with regard to the location of the well and obtaining a hazardous waste facilities permit. Existing law also imposes other requirements upon the operator of an injection well and defines the term "injection well" for these purposes as excluding wells regulated by the Division of Oil and Gas, pursuant to specified federal regulations. A violation of the hazardous waste control law is a crime.

~~This bill would define produced water and require its regulation as a hazardous substance during the extraction of oil and gas, including hydraulic fracturing operations delete that exclusion of those regulated wells from the definition of “injection well,” thereby subjecting those wells to the requirements imposed upon injection wells.~~

Since a violation of these requirements would be a crime, the bill would impose a state-mandated local program.

(2) Existing law requires an operator of a class II commercial wastewater disposal well who engages in the drilling, redrilling, or deepening of, or any operation altering the casing of, the well, or in maintaining or abandoning the well or attendant facilities, to file with the State Oil and Gas Supervisor an indemnity bond in a specified amount. Existing law defines the term class II commercial wastewater disposal well for this purpose as a well that, among other things, is used to dispose of oilfield wastewater.

This bill would specify that, for this purpose, oilfield wastewater does not include hazardous waste.

~~The~~

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. *The Legislature finds and declares all of the*
2 *following:*
3 (a) *Produced water is any fluid that is emitted from an oil or*
4 *gas production well. Produced water historically has been exempt*
5 *from California hazardous waste management laws when disposed*
6 *of in class II commercial wastewater disposal wells and therefore*
7 *has been disposed of in these wells without prior testing for*
8 *hazardous content. As a result, no public agency has monitored*
9 *or collected comprehensive data on the volume or toxicity of*
10 *hazardous materials injected into class II commercial wastewater*
11 *disposal wells in California.*

1 (b) Produced water from oil and gas wells may contain a variety
2 of chemicals that are hazardous. Well stimulation techniques often
3 inject hazardous chemicals into wells that return to the surface as
4 produced water. In addition, fluids emitted from wells may carry
5 dissolved hazardous elements from the underground rock
6 formation.

7 (c) A common form of well stimulation is hydraulic fracturing,
8 by which tens of thousands to millions of gallons of fluid are
9 injected into a well under pressure. Hydraulic fracturing uses a
10 variety of hazardous chemicals. A 2011 survey by the United States
11 House of Representatives Committee on Energy and Commerce
12 minority staff found 29 chemicals used in hydraulic fracturing are
13 (1) known or possible human carcinogens, (2) regulated under the
14 federal Safe Drinking Water Act for their risks to human health,
15 or (3) listed as hazardous air pollutants under the federal Clean
16 Air Act. These chemicals contaminate produced water and are
17 eventually disposed of, usually into a class II commercial
18 wastewater disposal well. Without proper handling and monitoring
19 of hazardous wastes from this process, the state does not have any
20 way to know of, or prevent, any contamination in case of a well
21 failure.

22 (d) Class II commercial wastewater disposal wells may pierce
23 aquifers suitable for domestic or agricultural use. If the well casing
24 fails, materials may potentially leak into surrounding groundwater.
25 Once an aquifer is contaminated, it is virtually impossible to clean
26 it. Groundwater is a vital resource for human health,
27 environmental well-being, and economic productivity.
28 Groundwater should be protected for beneficial uses, including
29 human consumption, agriculture, surface water supply, and
30 recreation.

31 (e) Therefore, it is intent of the Legislature to ensure that oilfield
32 waste be regulated in the same manner as other forms of waste by
33 removing the exemption for produced water in the Health and
34 Safety Code. If the produced wastewater is hazardous, then well
35 operators should handle it in the same manner as other forms of
36 hazardous waste.

37 SEC. 2. Section 25159.12 of the Health and Safety Code is
38 amended to read:

39 25159.12. For purposes of this article, the following definitions
40 apply:

- 1 (a) “Annulus” means the space between the outside edge of the
2 injection tube and the well casing.
- 3 (b) “State board” means the State Water Resources Control
4 Board.
- 5 (c) “Compatibility” means that waste constituents do not react
6 with each other, with the materials constituting the injection well,
7 or with fluids or solid geologic media in the injection zone or
8 confining zone in a manner as to cause leaching, precipitation of
9 solids, gas or pressure buildup, dissolution, or any other effect that
10 will impair the effectiveness of the confining zone or the safe
11 operation of the injection well.
- 12 (d) “Confining zone” means the geological formation, or part
13 of a formation, that is intended to be a barrier to prevent the
14 migration of waste constituents from the injection zone.
- 15 (e) “Constituent” means an element, chemical, compound, or
16 mixture of compounds that is a component of a hazardous waste
17 or leachate and that has the physical or chemical properties that
18 cause the waste to be identified as hazardous waste by the
19 department pursuant to this chapter.
- 20 (f) “Discharge” means to place, inject, dispose of, or store
21 hazardous wastes into, or in, an injection well owned or operated
22 by the person who is conducting the placing, disposal, or storage.
- 23 (g) “Drinking water” has the same meaning as “potential source
24 of drinking water,” as defined in subdivision (t) of Section 25208.2.
- 25 (h) “Facility” means the structures, appurtenances, and
26 improvements on the land, and all contiguous land, that are
27 associated with an injection well and are used for treating, storing,
28 or disposing of hazardous waste. A facility may consist of several
29 waste management units, including, but not limited to, surface
30 impoundments, landfills, underground or aboveground tanks,
31 sumps, pits, ponds, and lagoons that are associated with an injection
32 well.
- 33 (i) “Groundwater” means water, including, but not limited to,
34 drinking water, below the land surface in a zone of saturation.
- 35 (j) “Hazardous waste” means ~~any hazardous waste specified as~~
36 hazardous waste or extremely hazardous waste, as defined in this
37 chapter. ~~Any~~ A waste mixture formed by mixing ~~any~~ a waste or
38 substance with a hazardous waste shall be considered hazardous
39 waste for the purposes of this article.

1 (k) “Hazardous waste facilities permit” means a permit issued
2 for an injection well pursuant to Sections 25200 and 25200.6.

3 (l) “Injection well” or “well” means any bored, drilled, or driven
4 shaft, dug pit, or hole in the ground the depth of which is greater
5 than the circumference of the bored hole and any associated
6 subsurface appurtenances, including, but not limited to, the casing.
7 For the purposes of this article, injection well does not include
8 either of the following:

9 ~~(1) Wells include a well exempted pursuant to Section 25159.24.~~

10 ~~(2) Wells that are regulated by the Division of Oil and Gas in
11 the Department of Conservation pursuant to Division 3
12 (commencing with Section 3000) of the Public Resources Code
13 and Subpart F (commencing with Section 147.250) of Subchapter
14 D of Chapter 1 of Part 147 of Title 40 of the Code of Federal
15 Regulations and are in compliance with that division and Subpart
16 A (commencing with Section 146.1) of Part 147 of Subchapter D
17 of Chapter 1 of Title 40 of the Code of Federal Regulations.~~

18 (m) “Injection zone” means that portion of the receiving
19 formation that has received, is receiving, or is expected to receive,
20 over the lifetime of the well, waste fluid from the injection well.
21 “Injection zone” does not include that portion of the receiving
22 formation that exceeds the horizontal and vertical extent specified
23 pursuant to Section 25159.20.

24 (n) “Owner” means a person who owns a facility or part of a
25 facility.

26 (o) “Perched water” means a localized body of groundwater
27 that overlies, and is hydraulically separated from, an underlying
28 body of groundwater.

29 (p) “pH” means a measure of a sample’s acidity expressed as a
30 negative logarithm of the hydrogen ion concentration.

31 (q) “Qualified person” means a person who has at least five
32 years of full-time experience in hydrogeology and who is a
33 professional geologist registered pursuant to Section 7850 of the
34 Business and Professions Code, or a registered petroleum engineer
35 registered pursuant to Section 6762 of the Business and Professions
36 Code. “Full-time experience” in hydrogeology may include a
37 combination of postgraduate studies in hydrogeology and work
38 experience, with each year of postgraduate work counted as one
39 year of full-time work experience, except that not more than three

1 years of postgraduate studies may be counted as full-time
2 experience.

3 (r) “Receiving formation” means the geologic strata that are
4 hydraulically connected to the injection well.

5 (s) “Regional board” means the California regional water quality
6 control board for the region in which the injection well is located.

7 (t) “Report” means the hydrogeological assessment report
8 specified in Section 25159.18.

9 (u) “Safe Drinking Water Act” means Subchapter XII
10 (commencing with Section 300f) of Chapter 6A of Title 42 of the
11 United States Code.

12 (v) “Strata” means a distinctive layer or series of layers of earth
13 materials.

14 (w) “Waste management unit” means that portion of a facility
15 used for the discharge of hazardous waste into or onto land,
16 including all containment and monitoring equipment associated
17 with that portion of the facility.

18 *SEC. 3. Section 3205.2 of the Public Resources Code is*
19 *amended to read:*

20 3205.2. (a) Notwithstanding Section 3204, ~~any~~ a person who
21 engages in the operation of a class II commercial wastewater
22 disposal well, as defined in subdivision (d), shall file an indemnity
23 bond with the supervisor for fifty thousand dollars (\$50,000) for
24 each well so used. The bond shall cover all operations of drilling,
25 redrilling, deepening, altering casing, maintaining, or abandoning
26 the well and attendant facilities. The bond shall be executed by
27 the person as the principal, and by an authorized surety company
28 as the surety, and, except for differences in the amount, shall be
29 in substantially the same language and upon the same conditions
30 as provided in Section 3204.

31 (b) A blanket bond submitted under subdivision (a) or (c) of
32 Section 3205 may be used in lieu of the bond required in
33 subdivision (a), except that the termination and cancellation shall
34 be in accordance with subdivision (c) of this section.

35 (c) Notwithstanding Section 3207, ~~any~~ a bond issued in
36 compliance with this section may be terminated and canceled and
37 the surety relieved of all obligations ~~thereunder~~ *under the bond*
38 when the well is properly abandoned or another valid bond has
39 been substituted ~~therefor~~ *for the bond*.

1 (d) (1) A class II commercial wastewater disposal well is a well
 2 that is used to dispose of oilfield wastewater, *as specified in*
 3 *paragraph (2)*, for a fee and that is regulated by the division
 4 pursuant to this chapter and Subpart F (commencing with Section
 5 147.250) of Part 147 of Title 40 of the Code of Federal Regulations.

6 (2) *For purposes of paragraph (1), oilfield wastewater does not*
 7 *include hazardous waste, as defined in Chapter 6.5 (commencing*
 8 *with Section 25100) of Division 20 of the Health and Safety Code.*

9 ~~SECTION 1. Article 17 (commencing with Section 25258.3)~~
 10 ~~is added to Chapter 6.5 of the Health and Safety Code, to read:~~

11

12 ~~Article 17. Hydraulic fracturing produced water~~

13

14 ~~25258.3. For purposes of this article, “produced water” means~~
 15 ~~any water brought up from the hydrocarbon-bearing formation~~
 16 ~~strata during the extraction of oil and gas, including hydraulic~~
 17 ~~fracturing operations, and can include formation water, injection~~
 18 ~~water, and any chemicals added downhole or during the oil and~~
 19 ~~water separation process.~~

20 ~~25258.4. Produced water shall be regulated as, and shall be~~
 21 ~~deemed to be, a hazardous waste for purposes of this chapter and~~
 22 ~~the regulations adopted pursuant to this chapter.~~

23

~~SEC. 2.~~

24

~~SEC. 4.~~ No reimbursement is required by this act pursuant to
 25 Section 6 of Article XIII B of the California Constitution because
 26 the only costs that may be incurred by a local agency or school
 27 district will be incurred because this act creates a new crime or
 28 infraction, eliminates a crime or infraction, or changes the penalty
 29 for a crime or infraction, within the meaning of Section 17556 of
 30 the Government Code, or changes the definition of a crime within
 31 the meaning of Section 6 of Article XIII B of the California
 32 Constitution.